

**BAPTISIA TINCTORIA (LEGUMINOSAE) NEW TO WISCONSIN:** While on a plant taxonomy class field trip on July 16, 1969, I discovered an unusual legume with chrome-yellow flowers that Dr. Hugh H. Iltis immediately identified as *Baptisia tinctoria* (L.) Vent. (Wild indigo). The plants were growing in sand on a low ridge along the south side of Rowan Creek in a village park 1½ miles west of Poynette, Columbia County, Wisconsin (SE ¼ sec. 33, T11N, R9E). Our collection (*T. Cochrane, H. Iltis, & class 838, GH, MIL, US, UWM, WIS, and others*) constitutes a new record for the flora of the state. Larisey (Ann. Mo. Bot. Gard. 27: 119-244. 1940) cited no stations between Michigan and Minnesota, and Gleason and Cronquist indicated the same disjunction (*Man. Vasc. Pls.*, p. 401. 1963). The locality nearest to the Wisconsin station is in northeastern Illinois, where according to Swink (*Pls. Chicago Region*, p. 51. 1969) *Baptisia tinctoria* was collected long ago in Cook County. The latter station marks what must be regarded as the northwestern limit of the range of the species, inasmuch as its occurrences in southeastern Minnesota (Morley, *Spring Fl. Minn.*, p. 173. 1966), southwestern Minnesota (Larisey, l. c., p. 188), and south-central Wisconsin are believed to be introductions. Since sandy areas in the southern portion of Wisconsin have been botanized thoroughly, including the very locality stated above, and since the habitat is ecologically receptive, both by its nature and by occasional human disturbance, the Wisconsin record and undoubtedly also those records from Minnesota and Florida (Larisey, l. c., p. 185) represent peripheral isolated populations which can only be interpreted as the result of sporadic long-distance dispersal.

The habitat consists of dry, fine, Plainfield sand which is occupied by an extensive, brushy *Quercus velutina* barrens. *Baptisia tinctoria* is locally quite common here, forming a loose colony scattered for 100 yards along an abandoned lane and associating with *Rumex acetosella*, *Talinum rugospermum*, *Lespedeza capitata*, *Amorpha canescens*, *Tephrosia virginiana* var. *holosericea*, *Euphorbia corollata*,



*Ceanothus americanus*, *Aureolaria pedicularia* var. *ambigens*, and *Antennaria neglecta*. I returned to the area with a companion during mid-August, 1970 (*T. Cochrane & B. Warnes* 2097, 19 Aug. 1970, WIS), and early September, 1973 (*T. Cochrane & B. Cochrane* 5749, 2 Sept. 1973, MICH, MIN, WIS), and observed that the wild indigo was forming fruits. Forty-two plants were counted, the largest with 22 stems from the base and up to 1.1 m tall. Some were small, single stemmed and without flowers, indicating that the plants are reproducing. Additional associates seen at the time of the second visit were *Helianthemum canadense*, *Lithospermum caroliniense*, *Pedicularis canadensis*, *Rudbeckia hirta*, *Gnaphalium obtusifolium*, and *Solidago nemoralis*. Later in the season *Aster azureus* was in full bloom, making it the most showy species present; but the *Baptisia* dominated the herbaceous flora by its size, while the grasses dominated by their numbers. In the driest parts of the area *Eragrostis spectabilis* was the most common grass, with *Leptoloma cognatum*, *Koeleria macrantha*, *Bouteloua hirsuta*, and *Andropogon scoparius* also being important components of the vegetation. Other graminoids included *Juncus tenuis*, *Cyperus filiculmis* var. *macilentus*, *Carex muhlenbergii*, *Agropyron repens*, *A. trachycaulum* var. *glaucum*, *Sporobolus cryptandrus*, *Aristida basiramea*, *Sorghastrum nutans*, *Digitaria sanguinalis*, and *Panicum virgatum*. The oak barrens habitat is frequently described as being of "sterile" quality because its very sandy soils have high temperatures, low water supply, and lack nutrients. Yet in Wisconsin the barrens flora cannot be fairly characterized as depauperate, since it contains fully 70% as many species as comprise the state's dry forests, 88% as many as the more mesic oak openings, and 21% more than the dry prairies.

Larger leaflets in our material of *Baptisia tinctoria* are 1.5-2.6 cm long and 0.9-1.3 cm wide, fitting the description of var. *crebra* Fern. This variety was maintained by its author (Fernald, *Rhodora* 47: 94. 1945; *Gray's Man.*, ed. 8, p. 887. 1950) and by the monographer (Larisey, l. c.,



p. 185) ; others state (Clausen, *Rhodora* 46: 281. 1944) or imply (Gleason & Cronquist, l. c.) that a separate name for those individuals larger in habit and leaf dimensions is not justified.

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